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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,605	02/12/2004	Martinus Godefridus Johannes Spanjers	APV31184DIV	3950

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EXAMINER

MORILLO, JANEL COMBS

ART UNIT PAPER NUMBER

1742

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/776,605

Applicant(s)

SPANJERS, MARTINUS  
GODEFRIDUS

Examiner

Janelle Combs-Morillo

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17 and 21-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17 and 21-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 2/12/04
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4/5/04
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17, 21-39 and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 799900 A1 (EP'900) in view of JP 09-041064 A (JP'064).

EP'900 teaches an alloy composition that overlaps the instant composition ranges (instant claims 17, 21-39, 42, 43), see Table below. EP'900 does not mention die casting said alloy.

However, JP'064 teaches that substantially similar Al-Mg-Zn alloys can be die cast (see translation JP'064 [0009], etc.) into high strength and toughness parts (see [0017], etc.). Because JP'064 teaches that die casting Al-Mg-Zn alloys achieves high strength and elongation (abstract, etc.), it would have been obvious to one of ordinary skill in the art to die cast (as taught by JP'064) the Al-Mg-Zn alloy taught by EP'900.

Concerning dependent claims 44-49, though the prior art does not teach the UTS, YS, and elongation of the instant Al-Mg-Zn die cast alloy, because the combination of EP'900 and JP'064 teaches an alloy that substantially overlaps the presently claimed composition ranges as well as processing steps, then substantially the same properties, such as UTS, YS, and elongation, are expected to occur.

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Concerning claims 50 and 51, JP'064 teaches that said alloy is typically die cast into various auto parts (JP'064 [0003], [0005], [0010]), such as circumference parts of an engine and engine brackets for automobiles (see [0016]). Therefore, the examiner asserts that it is within the combination of EP'900 and of JP'064 to obtain a product suitable for a safety component of a vehicle (instant claim 50) or a frame member for a vehicle (instant claim 51), substantially as presently claimed.

	Mg	Mn	Zn	Zr	V	Sc	Ti	Fe	Si	Be	other
instant claim 17	4.5-6.0	0.4-1.4	0.1-0.9	0.05-0.25	0.3 max.	0.3 max.	0.2 max.	1.0 max.	1.4 max.	0.005 max.	
21	5.0-6.0										
22	5.2-5.8										
23			0.3-0.9								
24			0.4-0.9								
25			0.45-0.9								
26								0.5 max.			
27								0.3 max.			
28								0.2 max.			
29									0.10-1.4		
30									0.15-1.4		
31									1.0 max.		
32									0.5 max.		
33									0.3 max.		
34									0.10 min		
35									0.15 min		
36		0.4-1.2									
37		0.4-0.8									
38		0.45-0.8									
39				0.06-0.16							
40					0.05-0.25						
41					0.1-0.2						
42							0.01-0.14				
EP'900 broad	4.5-7	0.4-1.2	0.4-5.0	0.3 max.			0.2 max.	0.5 max.	0.5 max.		0.4 max. Cu
US'118 broad	3.0-5.0	0.75-1.0	<0.40	<0.20			<0.20	<0.25	<0.25		
WO'627	3.0-4.5	0.4-1.2	0.4-1.7	0.05-0.25	-0.2	-0.5	-0.2	-0.5	-0.5		

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3. Claims 17, 21, 23, 24, 26-39, and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2001/0050118 A1 (US'118) in view of JP'064.

US'118 teaches an alloy composition that overlaps the instant composition ranges (instant claims 17, 21, 23, 24, 26-39). Concerning die casting said alloy, JP'064 teaches that substantially similar Al-Mg-Zn alloys can be die cast (see translation JP'064 [0009], etc.) into high strength and toughness parts (see [0017], etc.). Because JP'064 teaches that die casting Al-Mg-Zn alloys achieves high strength and elongation (abstract, etc.), it would have been obvious to one of ordinary skill in the art to die cast (as taught by JP'064) the Al-Mg-Zn alloy taught by US'118.

Concerning dependent claims 44-49, though the prior art does not teach the UTS, YS, and elongation of the instant Al-Mg-Zn die cast alloy, because the combination of US'118 and JP'064 teaches an alloy that substantially overlaps the presently claimed composition ranges as well as processing steps, then substantially the same properties, such as UTS, YS, and elongation, are expected to occur.

Concerning claims 50 and 51, JP'064 teaches that said alloy is typically die cast into various auto parts (JP'064 [0003], [0005], [0010]), such as circumference parts of an engine and engine brackets for automobiles (see [0016]). Therefore, the examiner asserts that it is within the combination of US'118 and of JP'064 to obtain a product suitable for a safety component of a vehicle (instant claim 50) or a frame member for a vehicle (instant claim 51), substantially as presently claimed.

4. Claims 17 and 23-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/42627 (WO'627) in view of JP'064.

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WO'627 teaches an alloy composition that overlaps or touches the boundary of the instant composition ranges (instant claims 17, 21, 23, 24, 26-42), see Table above. Concerning die casting said alloy, JP'064 teaches that substantially similar Al-Mg-Zn alloys can be die cast (see translation JP'064 [0009], etc.) into high strength and toughness parts (see [0017], etc.). Because JP'064 teaches that die casting Al-Mg-Zn alloys achieves high strength and elongation (abstract, etc.), it would have been obvious to one of ordinary skill in the art to die cast (as taught by JP'064) the Al-Mg-Zn alloy taught by WO'627.

Concerning dependent claims 44-49, though the prior art does not teach the UTS, YS, and elongation of the instant Al-Mg-Zn die cast alloy, because the combination of WO'627 and JP'064 teaches an alloy that substantially overlaps the presently claimed composition ranges as well as processing steps, then substantially the same properties, such as UTS, YS, and elongation, are expected to occur.

Concerning claims 50 and 51, JP'064 teaches that said alloy is typically die cast into various auto parts (JP'064 [0003], [0005], [0010]), such as circumference parts of an engine and engine brackets for automobiles (see [0016]). Therefore, the examiner asserts that it is within the combination of WO'627 and of JP'064 to obtain a product suitable for a safety component of a vehicle (instant claim 50) or a frame member for a vehicle (instant claim 51), substantially as presently claimed.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER

jcm

June 7, 2004